

10-02-06

167 /62 (CASE 4-31153A

FILING BY "EXPRESS MAIL" UNDER 37 CFR 1.10

EV 72 72 72077 US

Express Mail Label Number

September 29, 206

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

IN RE APPLICATION OF

Art Unit: 1621

ACEMOGLU ET AL.

Examiner: Shippen, Michael L

APPLICATION NO: 10/089,038

FILED: MARCH 25, 2002

FOR: PROCESS FOR PHENYLACETIC ACID DERIVATIVES

Commissioner for Patents PO Box 1450 Alexandria, VA 22313-1450

COMMUNICATION REQUESTING WITHDRAWAL OF THE HOLDING OF ABANDONMENT

Sir:

This paper is being sent to request that the above-identified application, which became abandoned for failure to file a response to the Official Action, dated January 5, 2004, be withdrawn from abandonment and put back in pending status.

As is clear from the enclosed copies of the stamped return receipt postcard and the Express Mail label, an Amendment and Petition for Extension of Time were timely received by the U.S. Patent and Trademark Office (PTO) on July 6, 2004, July 5, 2004 being a holiday. The timely receipt of said papers by the PTO as also confirmed upon review of the contents of the file in the public "PAIR". Accordingly, Ms. Dolores DeCarmine called the PTO Inventor's Assistant Center on September 5, 2006 and was informed by the person checking the records that the Amendment and Petition for Extension of Time were put in the wrong case folder (Application No. 10/080,038), thereby causing the abandonment of the subject application, and were just recently moved to the right case folder (Application No. 10/089,038).

In any event, enclosed are copies of the Amendment and Petition for Extension of Time which were received by the PTO on July 6, 2004.

In view of the foregoing, it is clear that the above-identified application became abandoned as a result of **an administrative breakdown at the PTO**. Accordingly, it is respectfully requested that the status of the above-identified application be changed from "abandoned" to <u>pending</u>.

If any fee is believed to be necessary, the Commissioner is hereby authorized to charge Deposit Account No. 19-0134 in the name of Novartis.

Respectfully submitted,

Novartis Corporate Intellectual Property One Health Plaza, Building 104 East Hanover, NJ 07936-1080 (862) 778-7951

Encls.:

Date: September 29, 2006

Peter J. Waibel
Attorney for Applicants

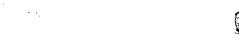
Reg. No. 43,228

Case No. 4-3	1193 A		8 4 2 2
Application No.	10/089,03	B.	
Mailing Date:	JU14: 61	2004	
Due Date:	Aveil 5	12004	
Express Mail No.:	EV SUD	56384 L	کر
The Patent & Trade	mark Office ackn	owledges, and	has stamped
hereon the date of	mark Office ackn receipt of the iter sponse/Letter - Foers - Fee \$ onal Stage al Application DIV (CONT (CONT) tion (CONT) cuted Decl. Fee Parts/Missing Re	ns checked bel	ow:
Mamendment/Re	sponse/Letter - F	ee \$((2pag)
☐ Appin. Filing Pa	pers - Fee \$	anian)	
□ PCT Natio	onal Stage	10 16	
☐ Provision	al Application		Á
□ RGE □.	DIV DVEONT L	CIP CIP	<u>(5)</u>
☐ Specifica	tion	STANCE	
☐ Executed/Unexe	cuted) Decl. Tree	GENERA	7
⊡ Preliminary Am		Hale Q	<i>\(\frac{1}{2} \)</i>
☐ Claim of Priority	Certified C	Copy(s)	TO F
☐ Amendment Aft	er Final	82129196	(F = 1/2)
☐ Notice of Appea	Fee \$	RS (TO) O	&/ ************************************
☐ Appeal Brief - F			UL 0 6 2004 2
☐ Issue Fee Paym		• • •	5
☐ Assignment Rec		\ 3	
☐ Formal Drawing		**	MA TRAIL
	g <u>'</u> s Fee \$		en i la
PTO-1449 Form Pet for Ext. of T	Pg's	0	
☐ Application Date	a Sheet		
☐ Seq. Listings	Pg's/Seq	. Disk	•
	· • • • • • • • • • • • • • • • • • • •	•	
· ·			
TEIN .			
Vinitials			82972/99A Rev.1
27 1 7			

.

EV 54015F384 NZ	Customer Cop EXPRESS NAVI
ORIGIN (POSTAL USE ONLY) PQ ZIP CS Dayof Delivery Flat Rate Envelope	DELIVERY POSTALUSE ONLY. Delivery Attempt Time Employee Signature
Date-irg /6 / 0 4 Second Description	Mo. Day AM PM Delivery Attempt Time P Employee Signature
Mo. Day Year 212 Noon 3 PN 5 5 5 Time () Military Receipt Fee	Mo. Day AM PM Dalivery Date Time Employee Signature
No Delines	Mo. Day 1 DAM Dent in consider insurance to void (7). AVE TO Sub-Burg (Contact Conf.) additional insurance in surance to void (7). A contact Conf. of the
CONTINUE STORY STO	CELVERY CONSTRUCT Sprant Spran
FROM: m commun	14 0 6 2004
NOVARTIS	O: PLEAGE PRINT) PHONE USPS TO AMENOMENT
ONE HEALTH PLAZA BLOG 430 EAST HANDVER MJ 07936-1016	CONTEST TONER FOR PATENTS
	The state of the s
PRESS HARD.	A Company of the Comp
You are making 3 copies FOR PICKUP OR TRACKING CALL 1-800-2	222-1811 www.usps.com = 2335







EV 540156384 US

Express Mail Label Number

Date of Deposit

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

IN RE APPLICATION OF

EXAMINER: M. L. Shippen

ACEMOGLU ET AL.

APPLICATION NO: 10/089038

ART UNIT: 1621

FILED: MARCH 25,2002

FOR: PROCESS FOR PHENYLACETIC ACID DERIVATIVES

Commissioner for Patents PO Box 1450 Alexandria, VA 22313-1450

AMENDMENT

Sir:

This amendment and attached papers are responsive to the Office Action mailed on January 5, 2004 and are being filed by Express mail on July 6, 2004. July 5, 2004 being a holiday, the Applicants file these papers and herein request a three month extension of time. The Commissioner is hereby authorized to charge the fee for \$950.00 for such extension and any additional fees that are properly assessable for the application to Deposit Account No. 19-0134 in the name of Novartis.

The amendments to the claims begin on page 2 of this response comments begin on page 5 in the section entitled "REMARKS".

AMENDMENTS TO THE CLAIMS

Listing of claims:

1. (currently amended) \underline{A} process for the production of a compound of Formula I, or a pharmaceutically acceptable salt thereof, or a pharmaceutically acceptable prodrug ester thereof,

wherein R is methyl or ethyl;

R1 is chloro or fluoro;

R2 is hydrogen or fluoro;

R3 is hydrogen, fluoro, chloro, methyl, ethyl, methoxy, ethoxy, or hydroxy;

R4 is hydrogen or fluoro; and

R5 is chloro, fluoro, trifluoromethyl or methyl,

I

provided that R1, R2, R3, R4 and R5 are not all fluoro when R is ethyl and R3 is H; comprising cleaving a lactam of formula II

wherein the symbols are as defined above with a base; and in the above process, if desired optionally, temporarily protecting any interfering reactive groups and then isolating the resulting compound of the invention formula I; and, if desired optionally, converting the free carboxylic acid of the compound of formula I into a pharmaceutically acceptable ester derivative





thereof; and[[/or]] if desired optionally, converting the free acid of formula I into a salt or a resulting salt of formula I into the free acid or into another salt.

2. (cancelled)

3. (currently amended) A process for the preparation of a compound of Formula I as defined in claim 1 [[.]]

I

which comprises one or more of processes a) to n) as defined in claim 2 and optionally or a process according to claim 1.

- 4. (original)
- 5. (original)
- 6. (original)
- 7. (original)

REMARKS

The Examiner has objected claims 3-6 under 37 C.F.R. § 1.75(c) as allegedly being in improper form for being multiple dependent claims which do not refer to more than one claim in the alternative. Accordingly, the Applicants have amended claim 3 to refer to more than one claim now using the alternative language "or". Claims 4, 5, and 6 are now properly dependent upon claim 3 which, in its amended form, is a proper multiple dependent claim. Therefore, the Applicants respectfully request that the Examiner withdraw the rejection of claims 3-6 on these grounds.

The Examiner has rejected claim 1 under 35 U.S.C. § 112, second paragraph, as allegedly failing to particularly point out the invention due to the use of the phrase "if desired" for various process steps which are meant to be referred to as optional steps. The Applicants have amended the language of claim 1 so that all instances of the use of "if desired" have been replaced with the word "optionally". The deleted language, "if desired", is used in the original United Kingdom and European claims in the priority application. The use of the word "optionally" reflects the original intent of the Applicants in more proper United States practice language. The Applicants therefore respectfully request that the Examiner withdraw the rejections upon these grounds.

The Examiner has also rejected claim 1 under 35 U.S.C. § 112, second paragraph, as allegedly failing to particularly point out the invention due to the use of the phrase "compound of the invention". The Applicants have amended claim 1 to delete such language and replace it with "compound of formula I". In this way, the Applicants seek to highlight the compounds corresponding to formula I which result from the process described in claim 1 and reflected in the language on page 1 in lines 1-14 of the Specification. The Applicants therefore respectfully request that the Examiner withdraw the rejections upon these grounds.

The Examiner has rejected claim 2 as allegedly being drawn to an improper Markush grouping of processes. Claim 2 claims alternative methods of preparation of 2-arylamino-arylacetic acids (COX-2 Inhibitors). An overview of synthetic methodologies of the processes claimed in claim 2 is included in the Specification on page 11. As such, the processes steps claimed in claim 2 are well described and identified as producing intermediates in the production of the compound of formula I which has specific COX-2 inhibitory activity. The Applicants assert that the synthetic methodology flowchart on page 11 of the Specification establishes the requisite unity and is

reflected in the process steps claimed in claim 2. Therefore, the Applicants respectfully request that the Examiner withdraw the rejection of claim 2 upon these grounds.

The Examiner has rejected claim 7 as allegedly being drawn to an improper Markush grouping of compounds. The Examiner states that the members of the Markush group do not belong to a recognized class or that they do not possess common use or have separate uses in distinct processes. The Applicants assert that claim 7 claims compounds which may be used in the synthesis of 2-arylamino-arylacetic acids (COX-2 Inhibitors) that are exemplified in a compound of formula I as claimed in claim 1. The Overview of synthetic methodologies on page 11 of the Specification establishes that the compounds claimed in claim 7 are compounds which either a) have COX-2 inhibitory activity individually and/or b) are compounds which may be used as intermediates in synthetic methodologies which ultimately lead to a production of a compound of formula I as shown on page 11 of the Specification. The Applicants assert that the synthetic methodology flowchart on page 11 of the Specification exemplifies the required commonality for the Markush grouping which of claim 7. Therefore, the Applicants respectfully disagree with the Examiner's rejections and characterization of the compounds of claim 7 and request that the Examiner withdraw the rejection of claim 7 on these grounds.

The Examiner has rejected claims 1 and 2 under 35 U.S.C. § 103(a) over WO 99/11605 and U.S. Patent No. 3,558,690. The Examiner states that the Applicants' claimed process affords the products of the teachings of the prior art and that the use of a new starting material in an otherwise old process is considered obvious. The Examiner further states that the Applicants' products are "admittedly well known useful products" and cites Example 38 of WO 99/11605 and compounds of formula III (a) of US Patent No. 3,558,690 in order to attempt to make this point. The Applicants respectfully disagree with the Examiner and request that the rejection be withdrawn. Formula I as disclosed and claimed in the present Application provides that R1, R2, R4 and R5 are not all fluoro when R is ethyl and R3 is hydrogen (please see claim 1, page 46, line 12 and page 1 line 14 of the Specification). Therefore, a compound of formula I as disclosed and claimed in the present Application specifically excludes the starting compounds and the products of Example 38 and the claims of WO 99/11605 and also excludes the compounds of formula III (a) as disclosed in US Patent No. 3,558,690. The Applicant disagree that one would be motivated by the prior art teachings to make the compounds of the present invention via the process claimed in claims 1 and 2. In opposition to the Examiner's statements that the products are well-known in the art, the specific utility of the compounds as either COX-2 inhibitors or intermediates in the synthesis of such compounds is new and not disclosed in the prior art. There is no suggestion that one could make the COX-2 inhibitors of the present invention via the processes claimed in the present application. The exclusion of compounds in Example 38 of

WO 99/11605 and US 3,558,690 exemplifies the fact that such compounds are newly identified and claimed in the present Application. The Applicants therefore respectfully request that the Examiner withdraw the rejection of claims 1 and 2 on these grounds.

The Examiner has rejected claim 7 under 35 U.S.C. § 103(a) over WO 99/11605 and U.S. Patent No. 3,558,690. The Examiner states that the compounds of the present invention as claimed in claim 7 are homologues of the class of compounds of the references. The Applicants respectfully disagree with the Examiner and request that the rejection be withdrawn. As discussed above, for the rejection of claim 1 and 2, the prior art references do not disclose and claim that the specific starting materials or products may be used as intermediates in the preparation of the COX-2 inhibitors of the present invention. This includes the compounds of claim 7. The Applicants dispute that the compounds of claim 7 are homologues of the prior art disclosures. The community of properties associating the compounds of claim 7 in the present Application identifies that they are synthetic precursors to COX-2 inhibitors claimed in formula I. The compounds of formula I differ by more than a methylene linkage over the prior art cited by the Examiner. The compounds of the invention differ in the identities of from two to five substituents over the prior art as shown in claim 1 on page 46 in line 12. The compounds of claim 7 differ over the prior art by having different groups on both of the phenyl rings of the compounds of the invention. The Applicants assert that the compounds of the present invention are not taught by the prior art for the use claimed by the Applicants. The compounds claimed in the present application are in fact specifically selected outside of the prior art because they have been determined by the Applicants to be useful for preparation of the COX-2 inhibitor reaction products claimed in the present application. The Applicants therefore respectfully request that the Examiner withdraw the rejection of claims 1 and 2 on these grounds.

In light of the foregoing amendment and remarks the Applicants believe the Application is in condition for allowance and respectfully request early notice to that effect. If it will advance prosecution of the Application the Examiner is urged to contact the Applicants' undersigned counsel at the telephone number listed below.

Respectfully submitted,

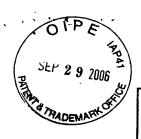
Edward J. Wildsz, Jř

Reg. No. 52,370

Attorney for Applicant

Novartis Corporate Intellectual Property One Health Plaza, Building 430 East Hanover, NJ 07936-1080 (862) 778-7960

Date: July 6, 2004



FILING BY "EXPRESS MAIL" UNDER 37 CFR 1.10

EV 540156384 US

Express Mail Label Number

Date of Deposit

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

IN RE APPLICATION OF

EXAMINER: M. L. Shippen

ACEMOGLU ET AL.

ART UNIT: 1621

APPLICATION NO: 10/089038

FILED: March 25, 2002

FOR: PROCESS FOR PHENYLACETIC ACID DERIVATIVES

Commissioner for Patents PO Box 1450 Alexandria, VA 22313-1450

PETITION FOR EXTENSION OF TIME

Sir:

The Office Action of January 5, 2004 has a shortened statutory time set to expire on April 5, 2004. A three-month extension is hereby requested pursuant to 37 CFR §1.136(a).

Please charge Deposit Account No. 19-0134 in the name of Novartis in the amount of \$950 for payment of the extension fee. An additional copy of this paper is here enclosed. The Commissioner is hereby authorized to charge any additional fees under 37 CFR §1.17 which may be required, or credit any overpayment, to Account No. 19-0134 in the name of Novartis.

Respectfully submitted,

Novartis Corporate Intellectual Property One Health Plaza, Building 430 East Hanover, NJ 07936-1080

Date: July 6, 2004

Attorney for Applicant

Reg. No. 52,370

Phone No. (862) 778-7960